

WHAT IS CLAIMED IS:

1. An encapsulant resin member for a semiconductor having an additive dissolved therein such that the concentration of the additive has a gradient in the direction of thickness of the encapsulant resin member.
2. A method of producing a semiconductor, comprising stacking on a surface of a semiconductor element at least two types of organic polymer resin members having different contents of an additive dissolved therein and encapsulating the semiconductor with the resin.
3. A method of producing a semiconductor, comprising applying an electric field to an encapsulant resin member to effect electrophoresis of a polar additive dissolved in the encapsulant resin thereby establishing a concentration gradient of the additive in the direction of thickness of the encapsulant resin member and encapsulating a surface of a semiconductor with the encapsulant resin.
4. The method according to Claim 3, wherein the electric field is applied to the encapsulant resin member by charging a surface of the encapsulant resin member.

5. The method according to Claim 3, wherein the electric field is applied to the encapsulant resin member by stacking an organic polymer resin member subjected to a corona discharge or plasma discharge treatment, on a surface of the encapsulant resin member.

6. A method of producing a solar cell module, comprising stacking on a surface of a photovoltaic element at least two types of organic polymer resin members having different contents of an additive dissolved therein and encapsulating the photovoltaic element with the resin.

7. A method of producing a solar cell module, comprising applying an electric field to an encapsulant resin member to effect electrophoresis of a polar additive dissolved in the encapsulant resin thereby establishing a concentration gradient of the additive in the direction of thickness of the encapsulant resin member and encapsulating a surface of a photovoltaic element with the encapsulant resin.

8. The method according to Claim 7, wherein the electric field is applied to the encapsulant resin member by charging a surface of the encapsulant resin member.

9. The method according to Claim 7, wherein the electric field is applied to the encapsulant resin member by stacking an organic polymer resin member subjected to a corona discharge or plasma discharge treatment, on the surface of the encapsulant resin member.

10. The method according to Claim 6, wherein the additive is a silane coupling agent, and wherein the content of the silane coupling agent is higher on a side of the organic polymer resin members in contact with a front surface member or on a side of the organic polymer resin in contact with the photovoltaic element.

11. The method according to Claim 7, wherein the additive is a silane coupling agent, and wherein the content of the silane coupling agent is higher on a light-incidence side of the encapsulant resin member.

12. The method according to Claim 6, wherein the additive is an ultraviolet absorbing agent, and wherein the content of the ultraviolet absorbing agent is higher on a light-incidence side of the organic polymer resin members.

13. The method according to Claim 7, wherein the additive is an ultraviolet absorbing agent, and wherein

the content of the ultraviolet absorbing agent is higher on a light-incidence side of the encapsulant resin member.

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14. A semiconductor element encapsulated with an encapsulant resin, wherein an additive dissolved in the encapsulant resin has a concentration gradient in the direction of thickness of the encapsulant resin.

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15. The semiconductor element according to Claim 14, wherein the semiconductor element is a photovoltaic element.

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16. The semiconductor element according to Claim 14, wherein the additive is at least one selected from a silane coupling agent and an ultraviolet absorbing agent.

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17. The semiconductor element according to Claim 14, wherein the concentration of the additive is higher at a location near the semiconductor element but lower at a location remote from the semiconductor element.

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18. The semiconductor element according to Claim 14, wherein the concentration of the additive is lower at a location near the semiconductor element but higher at a location remote from the semiconductor element.

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